

Key Outcomes Memorandum for the 2nd Water Management Science Board Meeting Convened May 4-5, 2005 Sacramento. CA

June 10, 2005

To: WM-SB Members

From: Jack Keller and Scott McCreary/Amy LeBlanc

Through: Tom Gohring

Re: Key Outcomes of the May 4-5, 2005 WM-SB Meeting

The Water Management Science Board (WM-SB) convened its second plenary meeting in Sacramento on May 4-5, 2005 (see Table 1). This Key Outcomes Memorandum provides a synoptic overview of meeting discussions, conclusions, and next steps. Key points discussed and engaged at the meeting are summarized below.

MEETING HIGHLIGHTS AND KEY OUTCOMES

- The Demand Management Task Force and the Water Quality Subcommittee a sub-board of the Water Management Science Board both reported on progress to-date and focus for the coming months. Dennis Wichelns is to serve as chair of the Demand Management Task Force. Bill Glaze is currently leading the Water Quality Subcommittee; it does not yet have a formal chair.
- Discussions with Department of Water Resources senior staff suggested that the Water Management Science Board may be able to help advise the department as it moves forward with its Integrated Regional Water Management Program. Further discussions are expected.
- The Water Management Science Board received briefings on and considered its possible connection to several different CBDA initiatives. These included: ISB Levee Task Force, Performance Measures, Multi-Year Work Plan, Adaptive Management, Watersheds Program Element and the Delta Improvements Package.

- The Water Management Science Board agreed to a list of eight candidate areas to focus its activities. These included:
 - 1. Demand Management (including review of the CUWCC¹'s approach to analyzing Avoided Costs and Benefits)
 - 2. Water Quality
 - 3. Levees
 - 4. Organizational Policy Change and Adaptive Management
 - 5. Modeling and Common Assumptions
 - 6. The Delta Improvements Package (DIP)
 - 7. Integrated Regional Water Management
 - 8. Watersheds
- CBDA staff is to develop a matrix to facilitate the Board's prioritization and work plan for these potential activities as these efforts are better defined.
- O CBDA staff, WM-SB Chair Jack Keller, and CONCUR will ensure that all WM-SB members have an opportunity to weigh in and participate in each activity. It was also agreed that while the initial composition of the Subcommittees and Task Forces would be proposed by the Chair and CALFED staff, all members of the WM-SB would be notified of activities and invited to attend each Subcommittee and Task Force meeting and be kept informed on their progress and important decisions between WM-SB meetings.
- The Water Management Science Board tentatively agreed to hold its next plenary meeting in September or October 2005, pending resolution of scheduling and budgetary issues.

Near the end of the meeting, the Board received a request from the California Urban Water Conservation Council (CUWCC) for assistance in peer review of evaluating conservation programs, as defined by the 1991 Memorandum of Understanding Regarding Urban Water Conservation in California (MOU). The CUWCC distributed a summary document entitled "Peer Review of Environmental Benefits Estimates for Water Conservation BMP Evaluation."

Table of Contents

- I. Purpose of the Water Management Science Board
- **II. Participants in the WM-SB Meeting**Table 1: WM-SB Members and Key Staff
- III. Update on WM-SB Subcommittees and Task Forces
 - Summary of Proposed Subcommittees and Task Forces
 - Updates by Established Subcommittees and Task Forces
 - Water Quality Subcommittee
 - Demand Management Task Force
- IV. Briefings

Table 2: Briefing Topics and Presenters

Briefing Summaries:

- 1. Independent Science Board (ISB) Levee Task Force
- 2. CALFED Performance Measures
- 3. The Integrated Regional Water Management Program
- 4. Multi-Year Work Plans
- 5. Adaptive Management
- 6. Watersheds Program Element
- 7. Consideration of the ISB's Delta Improvements Package.
- V. Meeting Wrap-up: Issues and Activities for WM-SB Consideration
- VI. Next Steps
- VII. List of Documents Reviewed and Distributed

Attachments:

1. Attachment 1: Summary Report of the May 3, 2005 Demand Management Task Force Meeting

I. PURPOSE OF THE WATER MANAGEMENT SCIENCE BOARD

CBDA convened the Water Management Science Board (WM-SB) to provide overarching review and coordination of strategies, plans, and specific issues of strategic importance that contribute to the CALFED Goals of Water Supply Reliability, Levee System Integrity, and Improved Water Quality. The nine program elements organized under the Water Management Program that are the focus of this Board include:

- 1. Water Management
- 2. Storage
- 3. Conveyance
- 4. Water Use Efficiency
- 5. Water Transfers
- 6. Environmental Water Account
- 7. Drinking Water Quality
- 8. Levee System Integrity
- 9. Watersheds

II. PARTICIPANTS IN THE WM-SB MEETING

The WM-SB meeting was attended by all sixteen WM-SB members, CBDA staff and consultants, implementing agency staff, BDPAC Subcommittee chairs and/or members, BDPAC members, and members of the public. A list of WM-SB members and key staff is provided in **Table 1** - **WM-SB Members and Key Staff** below.

Table 1 - WM-SB Members and Key Staff

WM-SB MEMBERS			
Name	Title	Expertise	
Michael Anderson	Professor, Dept. of Environmental Science, UC Riverside	Aquatic chemistry, toxicology, and microbiology	
Takashi Asano	Professor Emeritus, Civil and Environmental Engineering, UC Davis	Water recycling and desalination	
Tom Chesnutt	Co-Founder, A&N Technical Services, Inc.	Urban water conservation	
Michael Dettinger	Research Hydrologist, USGS and Scripps Institution of Oceanography	Surface water hydrology and storage	
Jody Emel	Professor, Graduate School of Geography, Clark University	Social geography (water, environment, place and space)	
William Glaze*	Professor, Dept. of Environmental and Biomolecular Systems, Oregon Health and Science University	Water quality and drinking water treatment	
Helen Ingram*	Professor, School of Social Ecology, UC Irvine	Water policy and analysis	
Jack Keller**	Principal, Keller-Bliesner Engineering	Agricultural water management	
Denise Lach	Professor, Dept. of Sociology, Co-Director, Center for Water and Environmental Sustainability, Oregon State University	Organizational and behavioral dynamics	
Daene McKinney	Professor, Dept. of Civil Engineering, University of Texas, Austin	Water resources and river basin modeling	
John Melack*	Professor, Bren School, Dept. of Ecology, Evolution, and Marine Biology, UC Santa Barbara	Aquatic ecology	
Stephen Monismith	Professor, Dept. of Civil and Environmental Engineering, Stanford University	Water conveyance through constructed & natural systems	
Richard Norgaard	Professor of Energy and Resources and of Agricultural and Resource Economics, UC Berkeley	Environmental economics	
Robert Twiss*	Professor, Professor Emeritus of Environmental Planning, College of Environmental Design, UC Berkeley	Water management/ecosystem restoration interaction	
Dennis Wichelns	Professor of Agricultural Economics, CSU Fresno	Resource economics	
William Woessner	Professor of Hydrogeology, University of Montana	Groundwater hydrology	
* Member of CALFED Independent Science Board (ISB) ** Interim WM-SB Chair			
KEY STAFF TO WM-SB			
Tom Gohring	Deputy Director, Water Management & Regional Coordination	CBDA	
Valerie Castro	Administrative Officer, Water Management Division	CBDA	
Scott McCreary	Principal Facilitator	CONCUR, Inc.	
Amy LeBlanc	Project Assistant	CONCUR, Inc.	

III. UPDATE ON WM-SB SUBCOMMITEES AND TASK FORCES

At the January 26-27, 2005 meeting, Board members agreed to establish four Subcommittees as a useful organizing structure for the work of the WM-SB. The four Subcommittees are:

- Water Quality (with initial focus on drinking water but with responsibility for all water sources and uses in the BD system with the exception of ecosystem restoration)
- o Agricultural and Urban Water Use Efficiency and Water Recycling
- Water Supply and Modeling
- o Organizational and Policy Change and Adaptive Management

Also at the previous meeting, Board members considered the merits of convening Task Forces, acknowledging that the formation of Task Forces depends on budget availability. The three proposed Task Forces are:

- Levee System Integrity Risk Analysis
- o Common Assumptions and Water Demand
- Water Management Aspects of the Delta Improvements Package (DIP)

To date, two of these groups have been formed: The Water Quality Subcommittee and the Demand Management Task Force. Below is a brief update on these groups' activity to-date.

Water Quality Subcommittee:

The Water Quality Subcommittee (WQSC) has been formed, and members (Michael Anderson, Bill Glaze, and Richard Norgaard) made a briefing on their work to-date to the full plenary on the morning of Day 2. Bill Glaze presented a PowerPoint entitled "Draft Work Plan: Water Quality Subcommittee" which highlighted the purpose, role, a draft conceptual model, and goals of the WQSC in accordance with the Record of Decision's overall target of continuously improving water quality in the Delta for all uses. (This PPT is now included as part of the meeting summary on the CBDA website.)

The purpose of the WQSC is to provide scientific analysis, counsel, and peer review of issues relating to the CALFED Water Quality programs. There was significant discussion regarding appropriate targets for drinking water quality. The elements discussed included: the water quality targets laid out in the ROD; the concept of an equivalent level of public health; and the differences and similarities between determining acceptable water quality for humans (end-users) and the quality required for the health of other species in the water system. Technical issues discussed included: where and when monitoring is currently taking place, other points where it should be taking place, and where some of the monitoring and filtering systems might need improvement in order for water in the Delta to meet water quality goals throughout the system. Water recycling in the context of water quality (as opposed to supply) was discussed, and Takashi Asano provided several global examples of successful recycling and reuse projects that he suggested be given further review and consideration.

Linda Smith of the Metropolitan Water District (MWD) commented that the initial work plan laid out by the WQSC looks promising, and that, as a stakeholder, MWD would like to be involved by the WQSC in that process. She contributed the perspective that end-users are most concerned with risks to public health, and that good scientific decisions need to be made on where to make investments throughout the system in order to meet new and emerging regulatory standards. Lisa Holm, CALFED Drinking Water Quality Manager, provided several clarifications on the overall DWQ program and intended approach.

Moving Forward: Format of the WQSC, Next Steps and Projects for the WQSC to Consider

As a clarification, Tom Gohring noted that the WQSC should function mostly in analysis and review modes.

Expansion of the WQSC to include more than its original three members is anticipated. All members of the WM-SB were invited to attend WQSC meetings in the future.

Priority projects for the Subcommittee to consider and ways the WQSC can assist the overall DIP and other CALFED Water Quality efforts were discussed. These include:

- Review of the California Bay Delta Public Advisory Committee's Equivalent Level of Public Health (ELPH) Protection definitions and current implementations, and provide feedback, examples, and case studies
- Track relevant state and worldwide efforts and initiatives on the development of integrative, e.g., risk-based, water quality indices and standards, particularly with regard to the emphasis within California of regionally-based water quality protection.
- Develop periodic reports and white papers and bring them before the full Board for review
- Be prepared to provide input when needed and possibly organize and convene subject-specific workshops and/or task forces.

Demand Management Task Force:

The Demand Management Task Force (DMTF) met for the first time on May 3^{rd.} and designated Dennis Wichelns as its chair. The initial meeting of the DMTF centered on refining the Draft Purpose and Problem Statement and discussing the conceptual framework and initial organizing questions.

Below are the highlights from the May 3 meeting. (See Attachment 1 for a summary of the DMTF meeting.)

o Tom Gohring opened up the discussion with an overview of the impetus for convening the DMTF. He characterized the initial problem statement for the DMTF briefly as follows: water use efficiency projects are apparently not being implemented as quickly or as broadly as envisioned in the CALFED ROD. He noted that managing water supply, quality, and

reliability can be approached from the supply side and/or the demand side. He observed that, to date, insufficient scientific attention has been given to the potential of Demand Management. The Water Management Program of the Authority asked the WM-SB to assist in addressing this issue, and at the January 26-27th meeting of the WM-SB, the Board agreed to create a Task Force to specifically investigate and address the potential of Demand Management.

- o It was agreed that the charge of the Demand Management Task Force should be to examine the broader question of how best to achieve public goals regarding water supply and demand management. Questions related to technical issues, statewide benefits, water rights, and institutional considerations were discussed. There was also significant discussion around the terminology and concepts surrounding the definition of "demand."
- Mark Roberson, Steve Hatchett, and David Mitchell, CALFED consultants, attended the DMTF meeting as experts and gave several detailed presentations and reports regarding the economics of water demand and future projections. The consequences of the newly released revised draft for public review of Bulletin 160 California Water Plan Update 2005, a proposed strategic plan to meet the state's water needs through 2030 were considered, particularly the methods by which water demand is measured, monitored, and priced. Problems such as a lack of a central reporting node and current, accurate data were noted.
- Tom Gohring asked if the Task Force members thought that aerial maps overlaid with this water use data would be helpful in determining an overall picture of water use and identifying correlations. The Task Force members noted that getting accurate data and information in that format would be extremely difficult, but it would be helpful.
- Other topics discussed include:
 - 1. CALFED's current efforts in establishing and implementing Quantifiable Objectives (QO) and Best Management Practices (BMPs);
 - 2. The effectiveness of the current Water Use Efficiency (WUE) programs;
 - 3. The effect the 1991 Memorandum of Understanding Regarding Urban Water Conservation in California (MOU) has had on data collection and improved reporting;
 - 4. The role of the California Urban Water Conservation Council (CUWCC) in implementing that program and gathering information;
 - 5. The effects of current incentive programs (residential, urban and agricultural) have had on water demand and use; and
 - 6. The differences between agricultural and urban water use in terms of demand.

As DMTF chair, Dennis Wichelns provided a briefing – both verbal and written – on the DMTF's initial meeting to the full plenary on the afternoon of Day 1 (See Attachment 1).

Next Steps:

Tom Gohring will work with Dennis Wichelns and Jack Keller to refine and distribute the draft problem statement and conceptual model to include further elements discussed at the meeting.

The DMTF will prepare a primer on Demand Management, summarizing the key issues and recommendations, to present to the Board for their full review and consideration. The primer will serve to guide the focus of the Task Force as well as provide an analysis of the current state of water demand in California. The primer will include:

- 1. Definitions of key terms and concepts
- 2. Conceptual framework for water use efficiency
- 3. Atlas of water demand, water use, and incentives, by geographic region
- 4. Experience and opportunities
- 5. Recommendations for achieving statewide benefits

IV. BRIEFINGS

The meeting provided an opportunity for Board members to get further information and have deeper discussions on California water-related issues as well as receive briefings on topics they identified at the first meeting. In addition to the DMTF and WQSC briefings, the Board received briefings and presentations on:

- 1. Independent Science Board (ISB) Levee Task Force
- 2. CALFED Performance Measures
- 3. The Integrated Regional Water Management Program
- 4. Multi-year work plans
- 5. Adaptive Management
- 6. The Watersheds Program Element
- 7. The Delta Improvements Package.

The two-fold purpose of each briefing was to determine ways in which the WM-SB might characterize the current state of work and to assist these efforts. Below is a table of each briefing topic and presenter (Table 2).

Table 2: Briefing Topics and Presenters

Briefing Topic	Presenter
1. Independent Science Board Levee Task Force	Helen Ingram, Chair, ISB Levee Task Force
2. CALFED Performance Measures	Jack Keller, ISB Chair
3. Integrated Regional Water Management Program	Joe Grindstaff, Chief Deputy Director of the California Department of Water Resources
4. Multi-year Work Plans	Bob Twiss, Member of CALFED Independent Science Board (ISB)
5. Adaptive Management	Michael Healy, Institute for Resources, Environment and Sustainability at the University of British Columbia
6. CALFED Watersheds Program Element	John Lowrie, Program Manager, CBDA Watershed Program (WP)
7. CALFED Delta Improvements Package	Tom Dunne, ISB Chair

1. ISB Levee Task Force

Continuous improvement of levee system integrity is part of the CALFED Record of Decision. On the morning of Day 1, Helen Ingram, Chair of the ISB Levee Task Force, gave a brief summary of actions taken to date, a description of the Task Force's format and goals, and solicited ideas on how the WM-SB can support the ISB Levee Task Force.

Tom Gohring suggested the following ways in which the WM-SB can work with the ISB on this matter:

- Send a representative from the WM-SB to the next Levee Subcommittee meeting of the Bay Delta Public Advisory Committee (BD PAC) to introduce the WM-SB and to get an in-person update on their current efforts.
- Provide review of the current work being done by all parties on the levee system, especially DWR's pending review and Project Scope for the "Delta Risk Management Strategy for the Levees in the Sacramento-San Joaquin Delta" (DRMS).

It was noted that careful steps should be taken to not duplicate the work of the Independent Science Board in this regard.

Bill Glaze noted that, before moving forward, the WM-SB should seek clear indication from the ISB about where they are focusing their efforts. In this way the WM-SB can be most effective in both the long and short term.

2. CALFED Performance Measures

Jack Keller, Chair of the ISB, gave a brief update on CALFED's Performance Measures initiative on the morning of Day 1. He noted that in late 2004, CBDA had put forward a draft framework for defining Performance Measures – ways in which each program can be evaluated. Each program is currently working to define their own Performance Measures, and the ISB is helping to systematically review each one.

3. Integrated Regional Water Management Program

On the morning of Day 1, Joe Grindstaff, then-Chief Deputy Director of the California Department of Water Resources (DWR), was invited to present and discuss DWR's current work on Integrated Regional Water Management (IRWM). On April 13, 2005, DWR released the revised draft for public review of Bulletin 160: California Water Plan Update 2005, a proposed strategic plan to meet the state's water needs through 2030. Joe stated that, in the past, Bulletin 160 did more of a "gaps analysis" than present a strategy for moving forward. Bulletin 160 for 2005 strives to create an opportunity for regions to work together to create not only water supply plans but also habitat and water quality, including the integration of Basin Plans. The IRWM Program is focused on bringing local agencies together, creating trans-regional linkages, to work on these issues, and is aiming to use several grant and incentive programs to facilitate that cooperation. Joe indicated that funding needs to be in place before this Program can really start moving forward, and that DWR is discussing with stakeholders the efficacy of a water user infrastructure fee in order to fund these grants and incentives. Board members asked several clarifying questions regarding the current thinking on the user fee and grant process, and also asked for more information on existing DWR programs that link to the proposed IWRM strategies.

Scott McCreary asked Joe how the WM-SB might assist DWR in providing advice to this Program as it develops. Joe responded that as DWR is developing the program, it might be useful to circulate some of the draft requirements, criteria, and implementation documents for review by the WSMB. Joe noted that he had not previously considered using the WM-SB as a sounding board in this process, but now that he's been introduced to the Board, he is open to working with the WM-SB and utilizing their collective knowledge and experience in the process of developing the new program.

4. Scan of Multi-Year Work Plans

Bob Twiss, member of the CALFED Independent Science Board (ISB), gave a presentation entitled "Social Science support for the Water Management Program from a policy-down perspective," which gave an overview of selected actions of some of the multi-year program plans, including those related to storage, conveyance, and levee system integrity. Bob presented several alternate characterizations of scientific review processes, illustrating how data are linked to models and interpretations, and how these might apply to CBDA's overall goal of water management. The WM-SB discussed how to improve scientific input into these processes, how the social science communities can be better integrated and utilized to ground the information presented, and how the WM-SB can help identify uncertainties and information gaps as well as possible adaptive management structures to help inform decisions being made over the life of these projects.

5. Adaptive Management

Following Bob Twiss' presentation on social science and policy on Day 1, Michael Healy of the Institute for Resources, Environment and Sustainability at the University of British Columbia gave a presentation on Adaptive Management entitled "Engaging Science in Support of Water Management Policy". Michael's presentation and the ensuing discussion focused on integrating Adaptive Management processes into existing models of decision-making at CBDA, especially in longer-term projects, to utilize monitoring and scientific feedback loops in order to identify critical decision nodes before decisions need to be made. Potential obstacles to Adaptive Management such as governance issues and public perception of admitting uncertainties were pointed out and discussed by Board members.

Rhonda Reed of the CBDA Ecosystem Restoration Program (ERP) staff was in attendance and joined the discussion to fold in how the ERP is hoping to use Adaptive Management in their work, and to use the WM-SB to review water management-focused issues and objectives in order to provide the scientific feedback needed for an Adaptive Management process. Board members discussed issues of objectivity, legitimacy, and credibility in participating in these processes. Scott McCreary noted that the intrinsic independence of scientific review is an asset, so long as it is maintained as independent, and that recognizing and building on Independent Scientific Review and Adaptive Management can maximize the legitimacy and credibility of the policy development process. Jack Keller and Tom Gohring both noted that Adaptive Management is not currently a part of the draft Performance Measures, and that they should be integrated immediately.

6. Watersheds Program Element

On the afternoon of Day 2, John Lowrie, program manager of the CBDA Watershed Program, gave a presentation entitled "CALFED Watershed Program: Building Local Partnerships." The presentation included a review of the areas covered by the Watershed Program within the CALFED Solution Area, the

Program's goals and strategy, and its priority actions. The WM-SB discussed the need for further input and assistance from the scientific community, identified areas of overlap between the Watershed Program and the ERP, and strategies for better integrating the Programs' goals. The discussion emphasized strengthening community-based efforts and satisfying the human needs in watersheds while evaluating social and economic impacts.

Cathy Bleier, Deputy Assistant Secretary for Watersheds at the California Resources Agency, discussed the Agency's comprehensive review of community-based efforts and the State's involvement in these programs, including the IRWM Program. The Board discussed issues related to qualitatively and quantitatively evaluating watershed benefits, and how to quantifiably assess the economic value of improved watersheds. John Lowrie agreed that there are several places within the current Watershed Program that the WM-SB could be helpful, and Jack Keller suggested that a subcommittee be formed to review questions the Watershed Program has in order to determine how the Board might be useful and to report back with a proposal for moving forward together with the Watershed Program on this issue.

7. Delta Improvements Package

The final presentation briefing to the WM-SB came from Tom Dunne, ISB Chair, on the Delta Improvements Package (DIP). The Delta Improvements Package outlines actions related to water project operations in the Delta that will result in increased water supply reliability, improved water quality, environmental protection and ecosystem restoration, protection of the Delta Levee system, and analyses and evaluation to support improved real-time and long-term management. The discussion focused on important current questions and how the WM-SB might be engaged in answering them, particularly since the DIP is part of the ISB and subject to stringent guidelines, as previously discussed during the Levee Task Force update. There was significant discussion about the proposed increase in export pumping by the State Water Project (SWP) from 6,680 to 8,500 cubic feet per second and the conditions under which that would happen, and how the WM-SB can be engaged specifically on that issue in regard to modeling, monitoring, and technical review.

Tom Dunne proposed the following candidate activities for the WM-SB to consider relating to the DIP process:

- 1. Review and refine the ISB's set of questions currently being reviewed
- 2. Make a recommendation as to which question(s) should be pursued immediately, in what order and by which body or means
- 3. Recommend ways to engage talent and resources of agencies by broadening, linking, and supporting their current activities.
- 4. Consider whether/how to publicize all of the questions for wider analysis, such as by making a joint recommendation to the Authority or submitting a publication for CALFED's on-line journal.

The Board considered ways to approach these activities, and Helen Ingram suggested that the WM-SB first review the draft EIS/EIR to help to create

alternative Adaptive Management strategies, while at the same time closely reviewing the list of questions that the ISB has about the process. Tom Dunne agreed, and Tom Gohring stated that it was within the scope of the WM-SB to do so.

V. MEETING WRAP-UP: CANDIDATE ISSUES AND ACTIVITIES FOR WM-SB CONSIDERATION

 After receiving the briefings and discussing the current needs, questions, and issues of each activity, the Board revisited its candidate list of issues and activities, and once again discussed prioritization, feasibility, and possible ways to concurrently engage the various topics.

Those candidate issues are:

- 1. Demand Management (including review of the CUWCC²'s approach to analyzing Avoided Costs and Benefits)
- 2. Water Quality
- 3. Levees
- 4. Organizational Policy Change and Adaptive Management
- 5. Modeling and Common Assumptions
- 6. The Delta Improvements Package (DIP)
- 7. Integrated Regional Water Management
- 8. Watersheds

As noted earlier, the Demand Management and Water Quality issues have already been accepted as WM-SB activities and action has been taken on those issues by forming the Demand Management Task Force and the Water Quality Subcommittee.

The Board members then briefly explored which issues may overlap, and which, if any, could be wrapped into others in order to facilitate greater efficiency, as well as which currently have funding and immediate needs. Bill Glaze suggested that staff take a cut at elaborating on the candidate topics, identifying an "impact factor" for each of the nine issues. Tom Gohring agreed to put together a summary matrix showing the "binding sites" (linkage to pending decisions), the "impact factor," and available funding for each issue so that the Board can better determine how many of the topics they can reasonably expect to pursue as well as anticipate the timing of each.

Subcommittee/Task Force Membership and Budget Constraints

The Board acknowledged that not all Subcommittees and Task Forces will be convened immediately due to time and budget constraints, and discussed need, prioritization, feasibility, and availability of staff. It was also agreed that a) while the initial composition of the Subcommittees and Task Forces would be proposed by the Chair and CALFED staff, all members of the WM-SB would be notified of

² Near the end of the meeting, the Board received a request from the California Urban Water Conservation Council (CUWCC) for assistance in peer review of evaluating conservation programs, as defined by the 1991 Memorandum of Understanding Regarding Urban Water Conservation in California (MOU). The CUWCC distributed a summary document entitled "Peer Review of Environmental Benefits Estimates for Water Conservation BMP Evaluation."

activities and invited to attend each Subcommittee and Task Force meeting; and b) they will be kept informed on their progress and important decisions between WM-SB meetings, as some members may want to engage each task in a primary way while others may wish to serve in a review capacity.

Tom Gohring noted that due to budget constraints, there may not be sufficient funding to provide stipends for Board members' time for all of these meetings or activities. In order to facilitate engagement of the WM-SB in more activities and with greater frequency, he inquired as to whether WM-SB members would still be willing to participate in Subcommittee and Task Force meetings if there was only enough funding for direct expenses. Most WM-SB members agreed to consider this arrangement on a case-by-case basis.

VI. NEXT STEPS

Preparation of Key Outcomes Memorandum

CONCUR will work with WM-SB members and CBDA staff to prepare a Key Outcomes Memorandum. This document will be posted on the CBDA website as soon as it is complete.

Timing of the next WM-SB Plenary Meeting

The Board tentatively agreed to strive to meet in September or October 2005, pending resolution of scheduling and budget issues.

VII. DOCUMENTS REVIEWED AND DISTRIBUTED

The following documents were presented and distributed during the meeting, and are available on the project website:

http://calwater.ca.gov/watermanagement/watermanagementscienceboard.shtml

Day 1:

- Agenda
- o Letter from Andy Moran, Delta Wetlands Project
- o Jeffrey Mount and Bob Twiss: Report to the ISB Levee Subcommittee
- o **Bob Twiss' PowerPoint presentation** " Social Science support for the Water Management Program from a policy-down perspective"
- Michael Healy's PowerPoint presentation— "Engaging Science in Support of Water Management Policy"
- o Demand Management Task Force Summary Report
- o Conceptual Framework chart

Day 2:

- o Bill Glaze's PowerPoint presentation: "Draft Work Plan: Water Quality Subcommittee"
- John Lowrie's PowerPoint presentation: "CALFED Watershed Program: Building Local Partnerships."
- Tom Dunne's PowerPoint presentation for the Delta Improvements Package
- The CALFED Water Use Efficiency Subcommittee's 4/19/05 Quantifiable Objectives memorandum
- The CUWCC's "Peer Review of Environmental Benefits Estimates for Water Conservation BMP Evaluation" document. (Katie Shulte-Joung)

Attachment 1

Demand Management Task Force Summary Report of the May 3, 2005

Problem Statement

Water use efficiency projects are not being implemented as quickly or as broadly as expected. The Demand Management Task Force has been convened with the following goals:

- Determine why this is the case, and
- Make recommendations for enhancing statewide benefits from Demand Management programs.

Demand management is understood broadly to include both demand-side management [water use efficiency programs] and supply-side management [system loss programs or water recycling].

Discussion

The Demand Management Task Force should examine the broader question of how best to achieve public goals regarding water supply and demand management.

Presumably these public goals would overlap with the statewide benefits as specified by the Quantifiable Objectives:

Reducing irrecoverable losses
Increasing water supply
Reducing Delta exports
Providing a transferable water supply

Reducing recoverable losses
Increasing in-stream flows
Improving water quality
Increasing water supply flexibility
Modifying the timing of water demands

We should consider whether the original problem statement might preclude or distract the Demand Management Task Force from examining the broader question of determining how demand management can help achieve these statewide benefits.

Issues Regarding Concepts, Terms, Experience and Opportunities

Concepts and Terms

Water demand, water needs, water duty, and water use Water conservation, water savings, reduced water demand Engineering and economic perspectives regarding water demands "Measurement" is central to making water use efficiency a viable water resource option.

Options for the Subcommittee involving Scientific Issues

Agricultural, urban, and environmental sectors
Water prices, water allocations, and water rights
Defining goals and measuring success in all sectors
The role of incentives to improve water management
Incentives and enabling conditions _ actions _ costs and benefits
Feedback mechanism from results to incentives and enabling conditions
Water markets: institutions, measurement, infrastructure, and safeguards
The role of state organizations in assisting with the implementation of
technologically challenging, risky, or experimental water use efficiency
projects.

Organizational Assessment - Barriers due to existing institutions Implementation support for small agricultural and urban water agencies

Next Steps

A Primer on Demand Management

Definitions of key terms and concepts

Conceptual framework for water use efficiency

Atlas of water demand, water use, and incentives, by geographic region

Experience and opportunities

Recommendations for achieving statewide benefits

We should consider meeting again in September to discuss draft primer.